

卧式螺旋卸料离心机

Horizontal spiral discharge centrifuge



卧式螺旋卸料沉降离心机



LW常规型



LWX向心泵出液型



LWS三相分离型



LWZ沉降过滤离心机



LWFX隔爆型

卧式螺旋卸料过滤离心机



LLWZ型浓缩过滤离心机



LLW常规型



LLW液压型



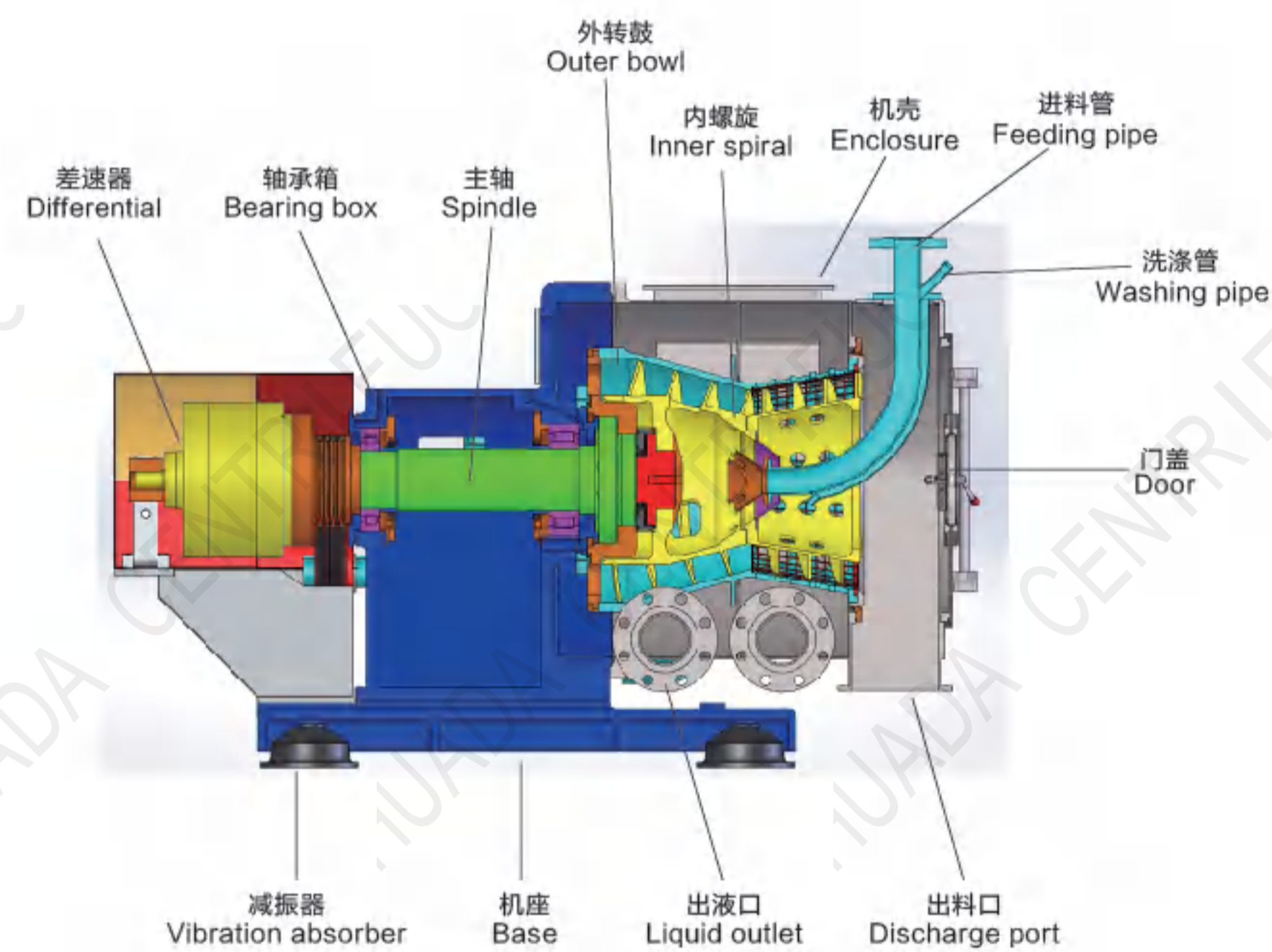
LLW螺旋进料型

LLWZ及LLW卧式螺旋卸料浓缩过滤/过滤离心机 LLWZ AND LLW HORIZONTAL THICKENING SCREEN/SCREEN WORM CENTRIFUGES

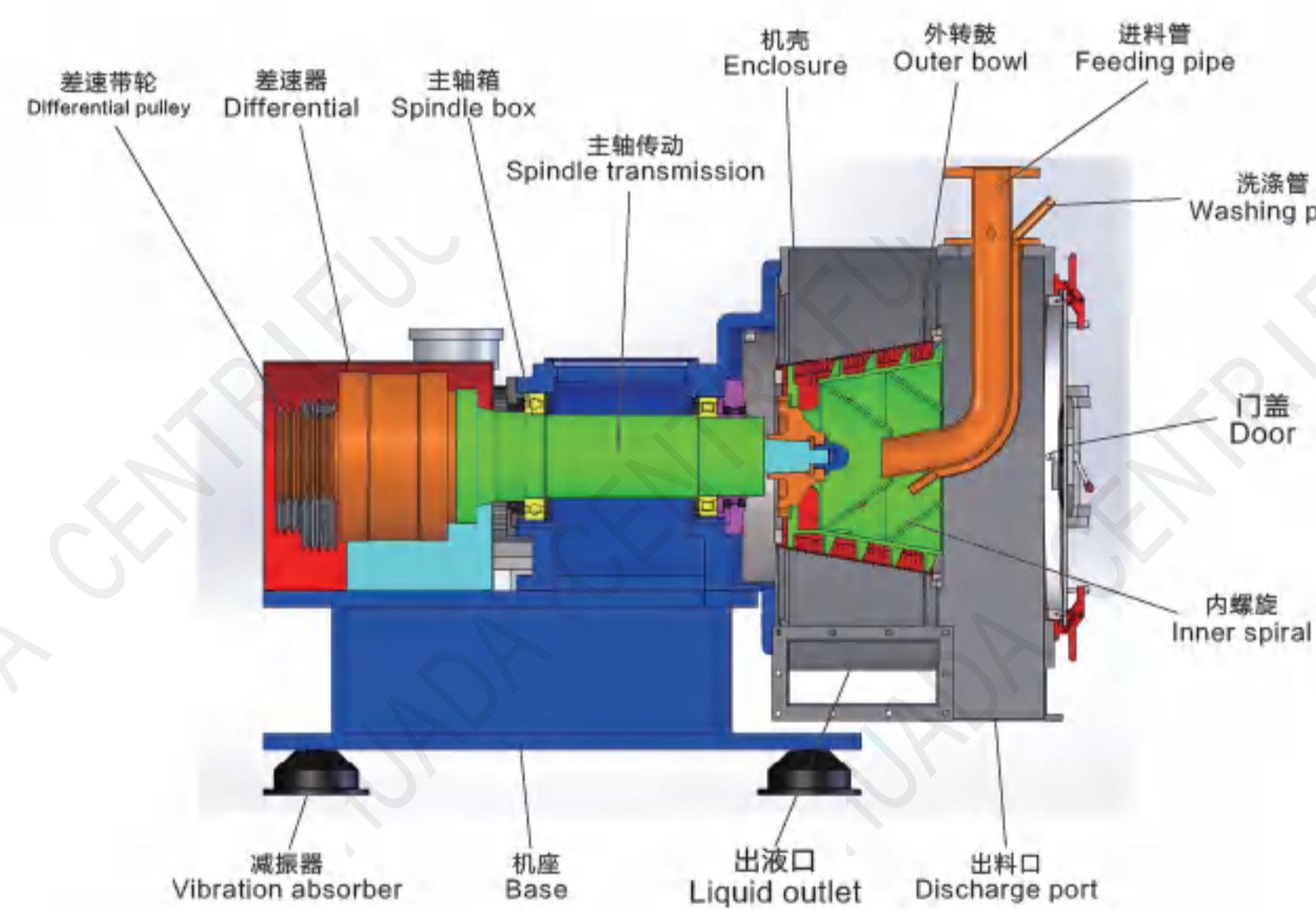
产品介绍 DESCRIPTION

卧式螺旋卸料过滤离心机是一种低能耗、高性能、分离效果好、工作连续、生产效率和自动化程度高的先进固液分离设备。悬浮液进入离心机后，在离心机转鼓高速旋转产生的离心力作用下，液相通过滤网和转鼓壁孔被甩出，固相则被截留在滤网上形成滤饼层，在相对差速的作用下由螺旋连续推料进入出料口，从而实现固液相自动、连续分离。

Horizontal screen worm centrifuge is an advanced solid-liquid separation equipment featuring low energy consumption, high performance, high automation, high production efficiency, good separation effect, and continuous working capability. After the suspension enters the centrifuge, the liquid phase is discharged out through the screen and the holes on the bowl wall under the centrifugal force generated by the high-speed revolution of the bowl, while the solid phase is retained on the screen to form a cake layer and then pushed to the discharge port through the spiral under the action of the relative differential. In this way, automatic and continuous separation of the solid and liquid phases is realized.



LLWZ型卧式螺旋卸料浓缩过滤离心机
LLWZ Thickening Screen Worm Centrifuge



LLW型卧式螺旋卸料过滤离心机
LLW Horizontal Screen Worm Centrifuge

LLWZ及LLW产品成功应用案例 SUCCESSFUL APPLICATIONS OF LLWZ AND LLW PRODUCTS

卧式螺旋卸料过滤离心机已广泛应用于化工、食品、盐、采矿、制药等行业，因其分离原理和结构特性，较强的物料针对性，主要适用于具有较大颗粒度、对颗粒破损没有严格要求的物料，诸如各类晶体、纤维、作物壳体、塑料粒子等。

Horizontal screen worm centrifuge has been widely applied in the chemical, food, salt, mining, pharmaceutical and other industries. Based on its separation principle, structural characteristics and relatively specific separation objects, this product is mainly applicable to the separation of materials with relatively large particle sizes and without strict requirements for the integrity of the particles, such as various crystals, fibers, crop shells, and plastic particles.

已成功应用 / Successful Applications

己二酸 Adipic acid	芒硝 Mirabilite	吡唑 Pyrazole	AH-盐 AH-Salt	过硫酸铵 Ammonium persulfate	石膏 Gypsum	硝酸银 Silver nitrate	磷酸铵 Ammonium phosphate	硫酸铵 Ammonium sulfate
离子交换树脂 Ion exchange resin	氯化钠 Sodium chloride	蒽 Anthracene	氯酸钠 Sodium chlorate	阿司匹林 Acetylsalicylic acid	甲酸钠 Sodium formate	硫酸锰 Manganese sulfate	硼砂 Borax	甲基纤维素 Methyl cellulose (MC)
甲酸钙 Calcium formate	硝酸钠 Sodium nitrate	过硼酸钠 Sodium perborate	磷酸钠 Sodium phosphate	柠檬酸 Citric acid	硫酸钠 Sodium sulfate	聚苯乙烯 Polystyrene	聚苯乙烯醇 Polystyrene alcohol	大苏打 Sodium thiosulfate
钾碱(碳酸钾) Potash (potassium carbonate)	酒石酸 Tartaric acid	结晶苏打 Crystallized soda	钾钒 Potassium vanadium	磷酸三钠 Trisodium phosphate	碳酸氢钾 Potassium bicarbonate	硫酸锌 Zinc sulfate	季戊四醇 Pentaerythritol	塑料颗粒 Plastic particles
硫代硫酸铵 Ammonium thiosulfate	偏硼酸钠 Sodium metaborate	硫酸铜 Copper sulfate	冰醋酸 Glacial acetic acid	氯化钾 Potassium chloride	五硫化二磷 Potassium pentasulfide	磷酸钾 Potassium phosphate	硫酸钾 Potassium sulfate

LLWZ及LLW系列卧式螺旋卸料离心机优势 ADVANTAGES OF LLWZ AND LLW DECANTER CENTRIFUGES

- 具有机械安全认证
With machine safety certification
- 配置转速检测
Provided with speed detection
- 过振动保护
Overtvibration protection
- 电机过载过热保护
Motor overload/overtemperature protection
- 防爆防护(选配)
Explosion protection (optional)
- 轴承温升监测保护
Bearing temperature rise monitoring and protection

- 低能耗
Low energy consumption
- 密闭性高
Highly airtight
- 变频控制无极调速
Variable frequency control and stepless speed regulation
- 振动小、噪音低
Small vibration and low noise

- 连续工作、处理量大
Continuous working and large handling capacity
- 检修方便、故障率低
Easy to inspect and maintain, with low failure rate
- 推料力矩大、不堵料
With large pushing moment to avoid material blocking
- 固相含湿率低
Low moisture in solid phases

- 多种材质
Multiple Materials
321、304、316L、2205、2507、904L、TA2、哈氏合金等

- 多种配置
Multiple Configurations
差速系统多样性
Diverse differential systems
过滤介质多样性
Diverse filtering media
进料方式多样性
Diverse feeding modes
润滑方式多样性
Diverse lubricating methods

- 转鼓锥角多工况多角度设计
Multiple working conditions designed for the bowl cone from multiple angles
10°、15°、20°

- 变频+PLC控制
Frequency conversion + PLC control
液压差速系统自适应补偿
Adaptive compensation of the hydraulic differential system



行星差速器特点 FEATURES OF PLANETARY DIFFERENTIAL

行星齿轮差速器与摆线针轮差速器相比较具有许多独特的优点，其最显著的特点就是：在传递动力时可以进行功率分流，且自适应补偿；便于实现高效率与高速比传动；输入轴与输出轴具有同轴性，结构紧凑、体积小、质量轻、受力平衡，抗冲击能力强。如今，行星传动系统已经越来越多的被人们用来替代摆线针轮系统，作为各种机械传动系统中的减速器、增速器和变速装置。

Compared to the cycloidal pinwheel differential, the planetary differential is more uniquely advantageous, especially in: power dividing and adaptive compensation during power transmission; achieving transmission ratio of high efficiency and high speed; coaxality of the input shaft and output shaft; compact structure, small volume, small mass, balanced stress, and strong impact resistance. Currently, the planetary transmission system is more used than the cycloidal pinwheel system as the speed reducer, increaser and variator for various mechanical driving systems.

行星差速器的主要特点如下:

- 体积小、质量小，结构紧凑，承载能力大；
- 传动效率高，其效率值可达0.97~0.99；
- 传动比高，可以实现运动的合成与分解以及实现各种变速的复杂的运动；
- 运动平稳、抗冲击和振动的能力较强。

Main Features of Planetary Differential:

- small volume, light weight, compact structure and large bearing capacity;
- High transmission efficiency, with the maximum value of 0.97~0.99;
- Transmission comparison design to realize composition and decomposition of motions as well as various complicated variable motions;
- Stable motion, strong resistance to impact and vibration.



LLWZ浓缩过滤离心机 LLWZ Thickening Screen Worm Centrifuge



LLWZ型浓缩过滤离心机
LLWZ Thickening Screen Worm Centrifuge

LLWZ型离心机是我公司自主研发的主打产品，其完美结合了沉降离心机和过滤离心机的结构特点。尤其对母液固含量低或含少量粘性物质的工况有良好的适用性，拓展了LLW离心机的适用范围。

料液在沉降段受离心力驱使进行固液分层，排出大部分液体或低密度粘性物质，经浓缩后的物料在过滤段进一步的脱水。在双重脱水机制联合作用下，可以确保固相含水率满足工艺设计要求。

LLWZ thickening screen worm centrifuge is a major product independently developed by our company, which perfectly combines the structural characteristics of the decanter centrifuge and the screen centrifuge. It is highly applicable to the working condition where there is low solid content or low content of sticky substances in the mother liquid, broadening the application scope of the LLW centrifuges.

Driven by the centrifugal force, the feed liquid is divided into a solid layer and a liquid layer at the decanting section, where most liquid or low-density sticky substances are discharged out, and then the concentrated materials are further dehydrated at the filtering section. Under the combined action of the dual-dehydration mechanism, the moisture content in the solid phase can be ensured to meet the process design requirements.

型号 Model	转鼓直径 (mm) Bowl Diameter	转鼓转速 (r/min) Bowl Speed	分离因数 Separation Factor	生产能力 (m³/h) Production Capacity	主电机功率 (kw) Power of Driving Motor	机器重量 (kg) Weight	外形尺寸 (长 x 宽 x 高) (mm) Dimension (LxWxH)
LLWZ450	450	2500	1575	2-8	30	1800	1800x1400x1250
LLWZ530	530	1800	960	3-10	45	3300	2450x1700x1500
LLWZ650	650	1600	930	5-15	55	4200	2650x1700x1600
LLWZ800	800	1500	1000	8-20	75	5000	3000x2200x2000
LLWZ900	900	1200	725	10-25	75	6500	3000x2200x2000

LLW螺旋卸料过滤离心机 (常规型) LLW Screen Worm Centrifuge (Standard Type)

产品介绍 DESCRIPTION

单电机变频驱动，转速无极可调。
Single-motor variable-frequency driving, stepless speed regulation.

采用摆线针轮差速器或行星齿轮差速器，使螺旋与转鼓之间具有一定的转速差。
Cycloidal pinwheel differential or planetary differential is adopted to ensure a certain speed difference between the spiral and bowl.



LLW型螺旋卸料过滤离心机 (常规型)
LLW Screen Worm Centrifuge (Standard Type)

型号 Model	转鼓直径 (mm) Bowl Diameter	转鼓转速 (r/min) Bowl Speed	分离因数 Separation Factor	生产能力 (m³/h) Production Capacity	主电机功率 (kw) Power of Driving Motor	机器重量 (kg) Weight	外形尺寸 (长 x 宽 x 高) (mm) Dimension (LxWxH)
LLW320	320	2630	1240	0.5-3	7.5	700	1050x1350x1000
LLW350	350	3000	1765	1-5	11	1200	1520x1380x1190
LLW450	450	2500	1575	2-8	22	1700	1570x1240x1200
LLW530	530	2000	1190	3-10	30	2500	1680x1390x1340
LLW630	630	1800	1140	5-15	37	3500	2100x1430x1530
LLW800	800	1500	1000	8-20	55	4500	2500x2200x1800
LLW1000	1000	900	450	10-30	75	6200	3200x2200x2300

LLW螺旋卸料过滤离心机 (液压型) LLW SCREEN WORM CENTRIFUGE (MECHANICAL GEARBOX TYPE)

- 采用液压差速器，体积小，推料力矩大，适用于固含量较大的物料。
- 差速反馈控制，具有超载报警输出端子、最高压力报警、停机功能。
- 差转速1-30r/min在线无级可调，无需停机，可实现全自动控制。
- 具有差速自动调整、功率自动补偿功能，差速补偿范围大，消除堵料现象，工况适应性强。
- 差速改变，原设定的初始差速推料力矩不变（易实现小差速运行）。
- 可在转鼓静止状态下启动排渣，不必拆机清洗，排除故障方便。
- Configured with hydraulic differential, small in volume and large in pushing moment, applicable to separation of materials with high solid content.
- Differential feedback control, with the functions of overload alarm at the leading-out terminal, maximum pressure alarm, and shutdown.
- Online stepless control of differential speed at 1-30r/min, without shutdown of the equipment, realizing full-automatic control.
- Designed with automatic differential adjustment and power compensation, as well as large compensation range to eliminate the blockage of materials, highly adaptive to various working conditions.
- The pushing moment at the initial differential remains unchanged despite the change of differential (for better operation at small differential speed).
- Deslagging can be enabled in the static state of the bowl, with no need to disassemble the equipment for washing, easier for troubleshooting.



LLW型螺旋卸料过滤离心机 (液压型)
LLW Screen Worm Centrifuge (Hydraulic Drive Type)

型号 Model	转鼓直径 (mm) Bowl Diameter	转鼓转速 (r/min) Bowl Speed	分离因数 Separation Factor	生产能力 (m³/h) Production Capacity	主电机功率 (kW) Power of Driving Motor	液压站电机功率 (kW) Power of Hydraulic Station Motor	机器重量 (kg) Weight	外形尺寸 (长 x 宽 x 高) (mm) Dimension (LxWxH)
LLW530Y	530	2000	1190	3-10	30	11-18.5	2500	1680x1390x1340
LLW630Y	630	1800	1140	5-15	37	15-30	3500	2100x1430x1530

LLW螺旋卸料过滤离心机 (螺旋进料型) LLW Screen Worm Centrifuge (Screw Feeding Type)



螺旋进料口
Spiral feeding port

螺旋进料平稳、可靠，振动小
Stable and reliable feeding, with small vibration

整体结构简单，操作、维护方便
Simple structure in whole, easy to operate and maintain

适合于浓度高、流动性差的晶体物料的分选
Applicable to the separation of crystal materials with high concentration and poor fluidity

LLW型螺旋卸料过滤离心机 (螺旋进料型)
LLW Screen Worm Centrifuge (Screw Feeding Type)

型号 Model	转鼓直径 (mm) Bowl Diameter	转鼓转速 (r/min) Bowl Speed	分离因数 Separation Factor	生产能力 (m³/h) Production Capacity	主电机功率 (kw) Power of Driving Motor	机器重量 (kg) Weight	外形尺寸 (长 x 宽 x 高) (mm) Dimension (LxWxH)
LLW350LX	350	2500	1765	1-5	11	1400	2300x1180x1000
LLW450LX	450	2500	1575	2-8	22	2000	2360x1210x1040
LLW530LX	530	2000	1190	3-10	30	2800	2650x1350x1230
LLW630LX	630	1800	1140	5-15	37	4200	3050x1580x1400